

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

**MORPHOMETRIC:**

Lake: HALFMILE POND	Lake Area (ha): 2.75
Town: ENFIELD	Maximum depth (m): 4.7
County: Grafton	Mean depth (m): 2.4
River Basin: Connecticut	Volume (m <sup>3</sup> ): 65500
Latitude: 43°34'30" N	Relative depth: 2.5
Longitude: 72°08'00" W	Shore configuration: 1.87
Elevation (ft): 1810	Areal water load (m/yr): 7.27
Shore length (m): 1100	Flushing rate (yr <sup>-1</sup> ): 3.10
Watershed area (ha): 45.8	P retention coeff.: 0.60
% watershed ponded: 0.0	Lake type: natural w/dam

**BIOLOGICAL:**

		8 January 1992	14 August 1991
DOM. PHYTOPLANKTON (% TOTAL)	#1	DINOBRYON 95%	DINOBRYON 99%
	#2		
	#3		
PHYTOPLANKTON ABUNDANCE (cells/mL)			1040
CHLOROPHYLL-A (µg/L)			2.58
DOM. ZOOPLANKTON (% TOTAL)	#1	CILIATE SPP. 46%	NAUPLIUS LARVAE 42%
	#2	CALANOID COPEPODS 20%	KERATELLA 19%
	#3	KERATELLA 17%	CALANOID COPEPODS 16%
ROTIFERS/LITER		33	85
MICROCRUSTACEA/LITER		20	133
ZOOPLANKTON ABUNDANCE (#/L)		98	218
VASCULAR PLANT ABUNDANCE			Scattered
SECCHI DISK TRANSPARENCY (m)			4.0
BOTTOM DISSOLVED OXYGEN (mg/L)		10.2	4.5
BACTERIA (fecal col., #/100 ml) #1			< 10
	#2		
	#3		

**SUMMER THERMAL STRATIFICATION:**

not stratified

Depth of thermocline (m): None  
Hypolimnion volume (m<sup>3</sup>) : None  
Anoxic volume (m<sup>3</sup>) : None

**CHEMICAL:**

Lake: HALFMILE POND

Town: ENFIELD

	8 January 1992		14 August 1991		
DEPTH (m)	1.5	3.0	1.5		3.5
pH (units)	5.2	5.2	5.6		5.6
A.N.C. (Alkalinity)	0.3	0.4	0.3		0.4
NITRATE NITROGEN	0.16	0.09	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN					
TOTAL PHOSPHORUS	0.005	0.003	0.012		0.012
CONDUCTIVITY ( $\mu$ mhos/cm)	24.7	22.6	17.4		17.6
APPARENT COLOR (cpu)	15	18	35		38
MAGNESIUM			0.28		
CALCIUM			1.2		
SODIUM			< 1.0		
POTASSIUM			< 0.40		
CHLORIDE	< 3	< 3	< 2		< 2
SULFATE	6	6	4		4
TN : TP					
CALCITE SATURATION INDEX			6.1		

All results in mg/L unless indicated otherwise

**TROPHIC CLASSIFICATION: 1991**

D.O. S.D. PLANT CHL TOTAL CLASS

**	2	1	0	3	Oligo.
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**COMMENTS:**

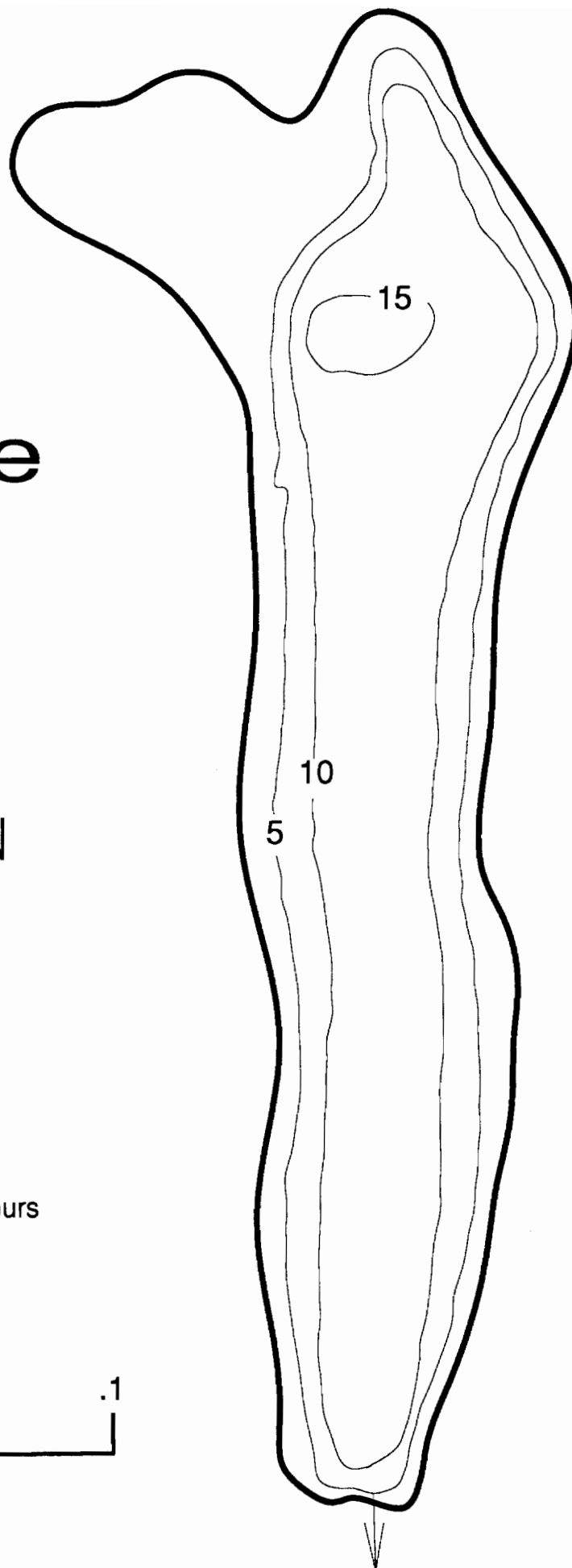
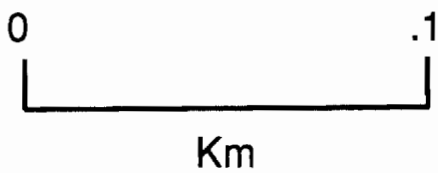
1. This is a remote trout pond, less than 10 acres, that was surveyed cooperatively with the NH Fish and Game Department.
2. The pond is also monitored annually by helicopter for acid rain-related parameters in a joint NHDES/NHF&G program.
3. Merismopedia (90%) was the dominant genus of wholewater plankton.

# Halfmile Pond Enfield

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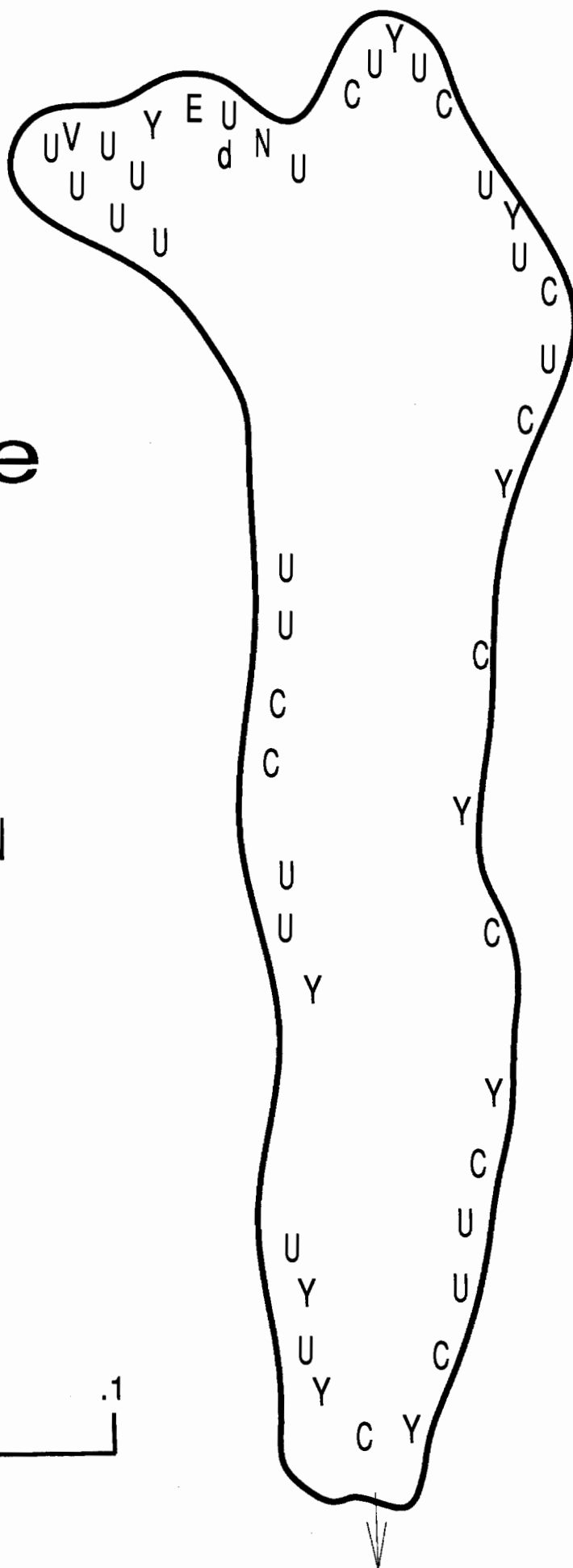
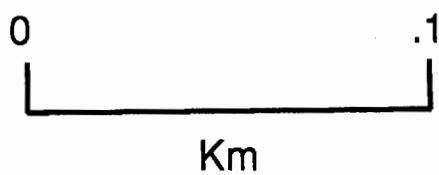
5 foot depth contours



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# Halfmile Pond Enfield



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